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EXAMINER	
SHIN, KYUNG H	
ART UNIT	**PAPER NUMBER**
2143	

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/071,326	HANNUKSELA ET AL.	
	Examiner	Art Unit	
	Kyung H Shin	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/24/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responding to application papers filed 2/8/2002.

2. Claims **1 - 23** are pending. Independent claims are **1, 18, 22**.

Claim Rejection - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 - 16, 18, 21 - 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Gunaseelan et al. (US PGPUB Application No. 2002/0097750).

Regarding Claim 1, Gunaseelan discloses a method of streaming media data by transmitting a plurality of data packets over a network from a source server to a client device (see Gunaseelan paragraph [0005], lines 3-9: media content distribution system utilizing packet data) wherein the client device includes a decoder for decoding encoded packets (see Gunaseelan paragraph [0023], lines 8-16; paragraph [0039], lines 9-12: processing of media content includes decoding), wherein the client device further

includes a pre-decoder buffer having a variable initial buffering time and a variable buffer size (see Gunaseelan paragraph [0039], lines 3-7; paragraph [0040], lines 1-7: pre-read (i.e. pre-decoder) buffer utilized, time (i.e. timestamp) and buffer size variable parameters utilized), the pre-decoder buffer for receiving the transmitted data packets from the source server prior to decoding in the decoder (see Gunaseelan paragraph [0039], lines 4-6: pre-read (i.e. pre-decode) buffer utilized), and wherein the variable initial buffering time and the variable buffer size of the pre-decoder buffer are dynamically adapted for improved playback performance by the client device. (see Gunaseelan paragraph [0006], lines 6-11paragraph [0049, lines 1-4; paragraph [0040], lines 1-7: adjust buffer size and time (i.e. timestamp, based on buffer size) parameters)

Regarding Claim 2, Gunaseelan discloses a method according to claim 1, wherein the client device submits a request to the source server to set either one or both of the initial buffering time and pre-decoder buffer size. (see Gunaseelan paragraph [0043], lines 7-11; paragraph [0039], lines 3-7: server returns buffer size parameter (i.e. pre-decoder buffer size) to be set by client)

Regarding Claim 3, Gunaseelan discloses a method according to claim 1, wherein a default initial buffering time and a default buffer size are defined for the pre-decoder buffer. (see Gunaseelan paragraph [0040], lines 1-7: client defines parameters (i.e. client based parameters (i.e. time and size) defined as default (i.e. not from server) or

original parameters))

Regarding Claim 4, Gunaseelan discloses a method according to claim 3, wherein the client device signals either one or both of the default initial buffering time or the default buffer size for the pre-decoder buffer to the source server. (see Gunaseelan paragraph [0040], lines 1-7: server queries client for parameters (i.e. time and size))

Regarding Claim 5, Gunaseelan discloses a method according to claim 1, wherein the variable initial buffering time of the pre-decoder buffer is adjusted by the client device responsive to an indication of a required pre-decoder initial buffering time received from the source server. (see Gunaseelan paragraph [0043], lines 7-11: client sets parameters (i.e. time and size) returned from server)

Regarding Claim 6, Gunaseelan discloses a method according to claim 1, wherein the variable buffer size of the pre-decoder buffer is adjusted by the client device responsive to an indication of a required pre-decoder buffer size received from the source server. (see Gunaseelan paragraph [0006], lines 6-11; paragraph [0049], lines 1-4: adjustment to (i.e. buffer size parameter, time parameter based on buffer size) parameters based on comparison of streaming media content delivery)

Regarding Claim 7, Gunaseelan discloses a method according to claim 1, wherein a plurality of copies of said media data are available to said source server, each of said

plurality of copies of the media data being characterised by at least one parameter indicative of a required property of the pre-decoder buffer in the client device. (see Gunaseelan paragraph [0023], lines 4-8; paragraph [0023], lines 24-26 paragraph [0039], lines 3-7: plurality of media data, size parameter for pre-read (i.e. pre-decoder) buffer)

Regarding Claim 8, Gunaseelan discloses a method according to claim 17 wherein said at least one parameter indicative of a required property of the pre-decoder buffer is transmitted from said source server to said client device. (see Gunaseelan paragraph [0043], lines 7-11: parameter (i.e. buffer size) transmitted from server to client)

Regarding Claim 9, Gunaseelan discloses a method according to claim 8, wherein said at least one parameter indicative of a required property of the pre-decoder buffer is transmitted from said source server to said client device during establishment of a streaming data connection between said source server and said client device for streamed download of said media data. (see Gunaseelan paragraph [0043], lines 7-11: client request for delivery of media data (i.e. establish a connection), parameters transmitted from server to client)

Regarding Claim 10, Gunaseelan discloses a method according to claim 8 or 9, wherein said at least one parameter indicative of a required property of the pre-decoder buffer is selected from a group including: a required pre-decoder initial buffering time, a

required pre-decoder buffer size, or both a required pre-decoder initial buffering time and a required pre-decoder buffer-size. (see Gunaseelan paragraph [0039], lines 3-7: parameter, size of pre-read (i.e. pre-decoder) buffer)

Regarding Claim 11, Gunaseelan discloses a method according to claim 1, wherein the dynamic adaptation is an adaption performed by the client device responsive to a signal from the source server. (see Gunaseelan paragraph [0040], lines 1-7; paragraph [0043], lines 7-11; paragraph [0006], lines 6-11: time (i.e. timestamp) parameter adjusted by server, parameters sent from server to client)

Regarding Claim 12, Gunaseelan discloses a method according to claim 1, wherein a buffering algorithm is used in said source server to control the transmission of said data packets. (see Gunaseelan paragraph [0039], lines 3-7: client buffering (i.e. buffering algorithm) for data transmission)

Regarding Claim 13, Gunaseelan discloses a method according to claim 12, wherein said buffering algorithm causes the source server to adjust the transmission times of data packets from the source server to the client device. (see Gunaseelan paragraph [0040], lines 1-7; paragraph [0006], lines 6-11: time (i.e. timestamp) parameter adjusted based on buffering parameters)

Regarding Claim 14, Gunaseelan discloses a method according to claim 12, wherein

said buffering algorithm verifies that the transmission of said data packets from the source is in accordance with the variable initial buffering time and variable buffer size of the pre-decoder buffer in said client device. (see Gunaseelan paragraph [0049], lines 1-4: comparison of delivery times utilized to verify performance parameters (i.e. time, size))

Regarding Claim 15, Gunaseelan discloses a method according to claim 1, wherein a post-decoder buffer is implemented in the client device to reduce decoding-related delay variations. (see Gunaseelan paragraph [0039], lines 1-3: buffers (i.e. pre-read buffer and other buffer(s)) utilized to smooth out performance during media data playback)

Regarding Claim 18, Gunaseelan discloses a system for streaming media data by transmitting a plurality of data packets, the system includes:

a) a source server hosting said media data; (see Gunaseelan paragraph [0023], lines 4-10; server system for media data delivery)

b) a network serving as a transmission medium for said data packets; (see Gunaseelan paragraph [0023], lines 1-3: network communications utilized for distribution system for media data) and

c) a client device capable of playing back said media data (see Gunaseelan paragraph [0028], lines 8-12: client plays delivered media content (i.e. playing back media data)) wherein said client device includes:

a) a pre-decoder buffer for receiving said transmitted data packets from said source server via said network said pre-decoder buffer having a variable initial buffering time and a variable buffer size; (see Gunaseelan paragraph [0039], lines 3-7: pre-read (i.e. pre-decoder) buffer, time (i.e. timestamp) parameter based on buffer size)

b) a decoder for decoding the data packets from the pre-decoder buffer; (see paragraph [0023], lines 8-16; paragraph [0039], lines 9-12: decode capability for delivered media data) and

c) means for dynamically adapting the variable initial buffering time and the variable buffer size of the pre-decoder buffer for improved playback performance by the client device. (see Gunaseelan paragraph [0040], lines 1-7; paragraph [0006], lines 6-11: adjust time (i.e. timestamp) and size parameters for performance improvement)

Regarding Claim 21, Gunaseelan discloses a system according to claim 18, wherein a buffering algorithm is implemented in the source server for ensuring that the data packets are transmitted at a rate that complies with the buffering capabilities of the client device. (see Gunaseelan paragraph [0041], lines 14-23: adjustment parameters for buffer processing are stored in server)

Regarding Claim 22, Gunaseelan discloses a client device for receiving a plurality of data packets transmitted over a network from a source server, wherein it includes:

a) a pre-decoder buffer for receiving said transmitted data packets from said source server via the network said pre-decoder buffer having a variable initial buffering time and a variable buffer size; (see Gunaseelan paragraph [0039], lines 3-7: pre-read (i.e. pre-decoder) buffer)

b) a decoder for decoding the data packets from the pre-decoder buffer; (see Gunaseelan paragraph [0023], lines 8-18; paragraph [0039], lines 9-12: decode capability utilized for media data) and

c) means for dynamically adapting the variable initial buffering time and the variable buffer size of the pre-decoder buffer for improved playback performance by the client device. (see Gunaseelan paragraph [0006], lines 6-11: paragraph [0040], lines 1-7: adjust parameters (i.e. time, size) for playback performance improvement)

Regarding Claim 23, Gunaseelan discloses a client device according to claim 22, wherein it is selected from a group including: a wireless terminal, a desktop computer, a laptop computer. (see Gunaseelan paragraph [0024], lines 7-9: client device, desktop computer or other types of computer systems)

Claim Rejection - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 16, 17, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunaseelan et al. (US Patent No. 2002/0097750) in view of West et al. (US Patent No. 6,842,433).

Regarding Claim 16, Gunaseelan discloses a media distribution system with media data transmitted to a wireless client device. (see Gunaseelan paragraph [0005], lines 3-10: media content (i.e. media data) distribution system utilizing wireless communications) Gunaseelan does not specifically disclose a wireless client device utilizing GPRS. However, West discloses a method according to claim 1, wherein the media data is transmitted to a wireless client device via a wireless data network such as GPRS (General Packet Radio Service) or UMTS (Universal Mobile Telecommunications System). (see West col. 5, lines 49-52; col. 36, lines 10-16: wireless communications system (i.e. utilizing GPRS and other wireless protocols such as UMTS) for distribution of media data (i.e. audio, video))

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gunaseelan to utilize wireless communications for the distribution of media content as taught by West. One of ordinary skill in the art would be motivated to employ West in order to increase the communications range of conventional portable computing devices and obtain the benefits from improvements in the ability to access information within a wireless communications environment. (see

West col. 1, lines 26-29: " ... *systems and methods for increasing the wireless communication range of conventional portable computing devices without requiring physical device modifications* ... "; col. 2, lines 37-39: " ... *benefit from improvements in their ability to access information at remote locations* ... ")

Regarding Claim 17, Gunaseelan discloses media data transmitted to a wireless client device and said network includes a wireless network. (see Gunaseelan paragraph [0005], lines 3-10; paragraph [0025], lines 10-12: media content (i.e. media data) distribution system utilizing wireless communications) Gunaseelan does not specifically disclose wireless communications utilizing GPRS. However, West discloses a method according to claim 1, wherein said network includes a wireless network, said wireless network being selected from a group comprising: a GPRS (General Packet Radio Service) wireless network and a UMTS (Universal Mobile Telecommunications System). (see West col. 5, lines 49-52; col. 36, lines 10-16: wireless communications system (i.e. utilizing GPRS and other wireless protocols such as UMTS) for distribution of media data (i.e. audio, video))

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gunaseelan to utilize wireless communications for the distribution of media content as taught by West. One of ordinary skill in the art would be motivated to employ West in order to increase the communications range of conventional portable computing devices and obtain the benefits from improvements in the ability to access information within a wireless communications environment. (see

West col. 1, lines 26-29; col. 2, lines 37-39)

Regarding Claim 19, Gunaseelan discloses a content distribution system utilizing wireless communications. (see Gunaseelan paragraph [0005], lines 3-10; paragraph [0025], lines 10-12: content distribution system, wireless communications) Gunaseelan does not specifically disclose a wireless communications utilizing the GPRS. However, West discloses a system according to claim 18, wherein the network includes a wireless network selected from a group comprising: a GPRS (General Packet Radio Service) wireless network and a UMTS (Universal Mobile Telecommunications System) (see West col. 5, lines 49-52; col. 36, lines 10-16: wireless communications system (i.e. utilizing GPRS and other wireless protocols such as UMTS) for distribution of media data (i.e. audio, video))

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gunaseelan to utilize wireless communications for the distribution of media content as taught by West. One of ordinary skill in the art would be motivated to employ West in order to increase the communications range of conventional portable computing devices and obtain the benefits from improvements in the ability to access information within a wireless communications environment. (see West col. 1, lines 26-29; col. 2, lines 37-39)

Regarding Claim 20, Gunaseelan discloses a content distribution system utilizing wireless communications. (see Gunaseelan paragraph [0005], lines 3-10; paragraph

[0025], lines 10-12: content distribution system, wireless communications) Gunaseelan does not specifically disclose a wireless device for packet receipt. However, West discloses a system according to claim 19, wherein the client device is a wireless terminal compatible for data packet use by said wireless system. (see West col. 5, lines 49-52; col. 38, lines 22-29: wireless communications system for distribution of media data (i.e. audio, video) to a wireless device)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gunaseelan to utilize wireless communications for the distribution of media content as taught by West. One of ordinary skill in the art would be motivated to employ West in order to increase the communications range of conventional portable computing devices and obtain the benefits from improvements in the ability to access information within a wireless communications environment. (see West col. 1, lines 26-29; col. 2, lines 37-39)

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung H Shin whose telephone number is (571) 272-3920. The examiner can normally be reached on 9 am - 7 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KHS

Kyung H Shin
Patent Examiner
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Mar 15, 2005

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